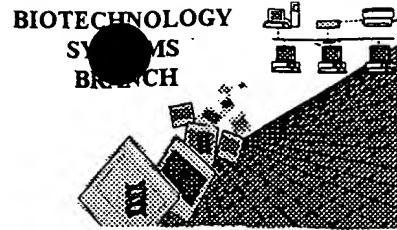


## RAW SEQUENCE LISTING ERROR REPORT



FY  
5630

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/763,824  
Source: PT/09  
Date Processed by STIC: 6/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

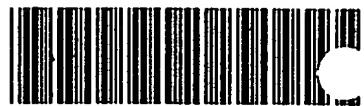
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

**Raw Sequence Listing Error Summary**

<b><u>ERROR DETECTED</u></b>	<b><u>SUGGESTED CORRECTION</u></b>	<b><u>SERIAL NUMBER:</u></b> <i>09/963,824</i>
<b>ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE</b>		
1 <input type="checkbox"/> Wrapped Nucleic Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to 3; this will prevent "wrapping."	
2 <input type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <input type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220><223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220><223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220><223> section to the subsequent amino acid sequence. This applies to the mandatory <220><223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (ii) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220><223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.	
10 <input type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220><223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <input type="checkbox"/> Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input type="checkbox"/> Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.	



PCT09

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/763,824

DATE: 06/06/2002  
TIME: 14:31:07

Input Set : A:\seq listing filed.txt  
Output Set: N:\CRF3\06062002\I763824.raw

P. 16

4 <110> APPLICANT: The Secretary of State for Defence in Her Britannic Majesty's  
5 Government of the United Kingdom of Great Britain and Northern Ireland  
6 Tisi, Laurence C  
7 Murray, James AH  
8 Lowe, Christopher R  
9 White, Peter J  
10 Murphy, Melanie J  
11 Price, Rachel L  
12 Squirrell, David

Does Not Comply  
Corrected Diskette Needed

15 <120> TITLE OF INVENTION: Novel enzyme  
17 <130> FILE REFERENCE: IPD/P1206/WOD

OK > 19 <140> CURRENT APPLICATION NUMBER: US/09/763,824

20 <141> CURRENT FILING DATE: 2002-04-29

22 <150> PRIOR APPLICATION NUMBER: GB 9823468.5

23 <151> PRIOR FILING DATE: 1998-10-28

25 <160> NUMBER OF SEQ ID NOS: 35

27 <170> SOFTWARE: PatentIn Ver. 2.1

29 <210> SEQ ID NO: 1

30 <211> LENGTH: 23

31 <212> TYPE: DNA

32 <213> ORGANISM: Artificial Sequence

34 <220> FEATURE:

35 <223> OTHER INFORMATION: Description of Artificial Sequence:

36 Oligonucleotide insufficient explanation - give source of genetic material  
(see item 11  
on Error  
summary sheet)

39 <400> SEQUENCE: 1

40 cggccgttag ctccccggccg ccg

43 <210> SEQ ID NO: 2

44 <211> LENGTH: 23

45 <212> TYPE: DNA

46 <213> ORGANISM: Artificial Sequence

48 <220> FEATURE:

49 <223> OTHER INFORMATION: Description of Artificial Sequence:

50 Oligonucleotide

52 <400> SEQUENCE: 2

53 cggcggcgagg gagtcaccgg gcg

23

56 <210> SEQ ID NO: 3

57 <211> LENGTH: 51

58 <212> TYPE: DNA

59 <213> ORGANISM: Artificial Sequence

61 <220> FEATURE:

62 <223> OTHER INFORMATION: Description of Artificial Sequence:

63 Oligonucleotide

65 <400> SEQUENCE: 3

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/763,824

DATE: 06/06/2002

TIME: 14:31:07

Input Set : A:\seq listing filed.txt

Output Set: N:\CRF3\06062002\I763824.raw

66 cgaacacttc ttcatcggtt accgccttaa gtcttaatt aaatacaaag g 51  
 69 <210> SEQ ID NO: 4  
 70 <211> LENGTH: 51  
 71 <212> TYPE: DNA  
 72 <213> ORGANISM: Artificial Sequence  
 74 <220> FEATURE:  
 75 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 76 Oligonucleotide  
 78 <400> SEQUENCE: 4  
 79 ccttgttatt taattaaaga cttaaggcgg tcaactatga agaagtgttc g 51  
 82 <210> SEQ ID NO: 5  
 83 <211> LENGTH: 32  
 84 <212> TYPE: DNA  
 85 <213> ORGANISM: Artificial Sequence  
 87 <220> FEATURE:  
 88 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 89 Oligonucleotide  
 91 <400> SEQUENCE: 5  
 92 gaaaggcccg gcaccgcct atccctctaga gg 32  
 95 <210> SEQ ID NO: 6  
 96 <211> LENGTH: 32  
 97 <212> TYPE: DNA  
 98 <213> ORGANISM: Artificial Sequence  
 100 <220> FEATURE:  
 101 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 102 Oligonucleotide  
 104 <400> SEQUENCE: 6  
 105 cctctagcgg ataggctggt gccgggcctt tc 32  
 108 <210> SEQ ID NO: 7  
 109 <211> LENGTH: 36  
 110 <212> TYPE: DNA  
 111 <213> ORGANISM: Artificial Sequence  
 113 <220> FEATURE:  
 114 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 115 Oligonucleotide  
 117 <400> SEQUENCE: 7  
 118 ccataaattt accgaattcg tcgacttcga tcgagg 36  
 121 <210> SEQ ID NO: 8  
 122 <211> LENGTH: 18  
 123 <212> TYPE: DNA  
 124 <213> ORGANISM: Artificial Sequence  
 126 <220> FEATURE:  
 127 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 128 Oligonucleotide  
 130 <400> SEQUENCE: 8  
 131 gtgtgaaatt gtgagcgg 18  
 134 <210> SEQ ID NO: 9  
 135 <211> LENGTH: 21  
 136 <212> TYPE: DNA

**RAW SEQUENCE LISTING** DATE: 06/06/2002  
**PATENT APPLICATION:** US/09/763,824 TIME: 14:31:07

Input Set : A:\seq listing filed.txt  
Output Set: N:\CRF3\06062002\I763824.raw

137 <213> ORGANISM: Artificial Sequence  
139 <220> FEATURE:  
140 <223> OTHER INFORMATION: Description of Artificial Sequence:  
141       Oligonucleotide  
143 <400> SEQUENCE: 9  
144 gagatacgcc gcgggttccttg g  
147 <210> SEQ ID NO: 10  
148 <211> LENGTH: 21  
149 <212> TYPE: DNA  
150 <213> ORGANISM: Artificial Sequence  
152 <220> FEATURE:  
153 <223> OTHER INFORMATION: Description of Artificial Sequence:  
154       Oligonucleotide  
156 <400> SEQUENCE: 10  
157 ccaggaaccg cggcgatct c  
160 <210> SEQ ID NO: 11  
161 <211> LENGTH: 30  
162 <212> TYPE: DNA  
163 <213> ORGANISM: Artificial Sequence  
165 <220> FEATURE:  
166 <223> OTHER INFORMATION: Description of Artificial Sequence:  
167       Oligonucleotide  
169 <400> SEQUENCE: 11  
170 ccctattttc attcctggcc aaaaggcactc  
173 <210> SEQ ID NO: 12  
174 <211> LENGTH: 30  
175 <212> TYPE: DNA  
176 <213> ORGANISM: Artificial Sequence  
178 <220> FEATURE:  
179 <223> OTHER INFORMATION: Description of Artificial Sequence:  
180       Oligonucleotide  
182 <400> SEQUENCE: 12  
183 gagtgctttt ggccaggaat gaaaataggg  
186 <210> SEQ ID NO: 13  
187 <211> LENGTH: 27  
188 <212> TYPE: DNA  
189 <213> ORGANISM: Artificial Sequence  
191 <220> FEATURE:  
192 <223> OTHER INFORMATION: Description of Artificial Sequence:  
193       Oligonucleotide  
195 <400> SEQUENCE: 13  
196 ccgcatacgg ctctctgcgt cagattc  
199 <210> SEQ ID NO: 14  
200 <211> LENGTH: 27  
201 <212> TYPE: DNA  
202 <213> ORGANISM: Artificial Sequence  
204 <220> FEATURE:  
205 <223> OTHER INFORMATION: Description of Artificial Sequence:  
206       Oligonucleotide

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/763,824

DATE: 06/06/2002  
TIME: 14:31:07

Input Set : A:\seq listing filed.txt  
Output Set: N:\CRF3\06062002\I763824.raw

```

208 <400> SEQUENCE: 14
209 gaatctgacg cagagagctc tatgcgg 27
212 <210> SEQ ID NO: 15
213 <211> LENGTH: 30
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence:
219 Oligonucleotide
221 <400> SEQUENCE: 15
222 gttgaccgct tggatccctt aattaaatac 30
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 22
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence:
232 Oligonucleotide
234 <400> SEQUENCE: 16
235 gtagatgtt gaaaaagagc tg 22
238 <210> SEQ ID NO: 17
239 <211> LENGTH: 22
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Description of Artificial Sequence:
245 Oligonucleotide
247 <400> SEQUENCE: 17
248 cagcttttt tcaaatttat ac 22
251 <210> SEQ ID NO: 18
252 <211> LENGTH: 22
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Description of Artificial Sequence:
258 Oligonucleotide
260 <400> SEQUENCE: 18
261 ggctacatac tggagacata gc 22
264 <210> SEQ ID NO: 19
265 <211> LENGTH: 22
266 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence:
271 Oligonucleotide
273 <400> SEQUENCE: 19
274 gctatgtctc cagtatgtag cc 22
277 <210> SEQ ID NO: 20
278 <211> LENGTH: 21

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/763,824

DATE: 06/06/2002  
TIME: 14:31:07

Input Set : A:\seq listing filed.txt  
Output Set: N:\CRF3\06062002\I763824.raw

```

279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: Description of Artificial Sequence:
284   Oligonucleotide
286 <400> SEQUENCE: 20
287 gcagttgcgc ccgtaacgca c
290 <210> SEQ ID NO: 21
291 <211> LENGTH: 21
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Description of Artificial Sequence:
297   Oligonucleotide
299 <400> SEQUENCE: 21
300 gtcgttacg ggcgcaactg c
303 <210> SEQ ID NO: 22
304 <211> LENGTH: 29
305 <212> TYPE: DNA
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence:
310   Oligonucleotide
312 <400> SEQUENCE: 22
313 caaatcattt cgggtactgc gatTTtaag
316 <210> SEQ ID NO: 23
317 <211> LENGTH: 29
318 <212> TYPE: DNA
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
322 <223> OTHER INFORMATION: Description of Artificial Sequence:
323   Oligonucleotide
325 <400> SEQUENCE: 23
326 cttaaaatcg cagtacccgg aatgatttg
329 <210> SEQ ID NO: 24
330 <211> LENGTH: 27
331 <212> TYPE: DNA
332 <213> ORGANISM: Artificial Sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Description of Artificial Sequence:
336   Oligonucleotide
338 <400> SEQUENCE: 24 → Please correct this error in subsequent
339 cccgcatagaa ctctctgcgt cagattc
342 <210> SEQ ID NO: 25
343 <211> LENGTH: 27
344 <212> TYPE: DNA
345 <213> ORGANISM: Artificial Sequence
347 <220> FEATURE:
348 <223> OTHER INFORMATION: Description of Artificial Sequence:

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27

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 06/06/2002  
PATENT APPLICATION: US/09/763,824                    TIME: 14:31:08

Input Set : A:\seq listing filed.txt  
Output Set: N:\CRF3\06062002\I763824.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:28; N Pos. 15,16,17  
Seq#:29; N Pos. 13,14,15